

## SEQUENCE LISTING

<110> FITZGERALD, STEPHEN NOEL  
 FAGAN, RICHARD JOSEPH  
 POWER, CHRISTINE  
 YORKE, MELANIE  
 BIENKOWSKA, JADWIGA

<120> ISOLATED INSP163 PROTEIN

<130> C.R.115

<140> US 10573,936  
 <141> 2006-03-30

<150> GB 0325038.8  
 <151> 2003-10-27

<160> 49

<170> SeqWin99, version 1.02

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 <213> Homo sapiens

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 gtgtccggca tcttccagtt ctgtccagtt ctgcacgtgg accacagtga gctgcaggc 600  
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 <212> PRT  
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Gln Arg Ala Asp Pro Pro Asn Ala Thr Ala Ser Ala Ser Ser Arg Glu  
 20 25 30

Gly Leu Pro Glu Ala Pro Lys Pro Ser Gln Ala Ser Gly Pro Glu Phe  
 35 40 45

Ser Asp Ala His Met Thr Trp Leu Asn Phe Val Arg Arg Pro Asp Asp  
 50 55 60

Gly Ala Leu Arg Lys Arg Cys Gly Ser Arg Asp Lys Lys Pro Arg Asp  
 65 70 75 80

Leu Phe Gly Pro Pro Gly Pro Pro Gly Ala Glu Val Thr Ala Glu Thr  
 85 90 95

Leu Leu His Glu Phe Gln Glu Leu Leu Lys Glu Ala Thr Glu Arg Arg  
 100 105 110

Phe Ser Gly Leu Leu Asp Pro Leu Leu Pro Gln Gly Ala Gly Leu Arg  
 115 120 125

Leu Val Gly Glu Ala Phe His Cys Arg Leu Gln Gly Pro Arg Arg Val  
 130 135 140

Asp Lys Arg Thr Leu Val Glu Leu His Gly Phe Gln Ala Pro Ala Ala  
 145 150 155 160

Gln Gly Ala Phe Leu Arg Gly Ser Gly Leu Ser Leu Ala Ser Gly Arg  
 165 170 175

Phe Thr Ala Pro Val Ser Gly Ile Phe Gln Phe Ser Ala Ser Leu His  
 180 185 190

Val Asp His Ser Glu Leu Gln Gly Lys Ala Arg Leu Arg Ala Arg Asp  
 195 200 205

Val Val Cys Val Leu Ile Cys Ile Glu Ser Leu Cys Gln Arg His Thr  
 210 215 220

Cys Leu Glu Ala Val Ser Gly Leu Glu Ser Asn Ser Arg Val Phe Thr  
 225 230 235 240

Leu Gln Val Gln Gly Leu Leu Gln Leu Gln Ala Gly Gln Tyr Ala Ser  
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Val Phe Val Asp Asn Gly Ser Gly Ala Val Leu Thr Ile Gln Ala Gly  
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Ser Ser Phe Ser Gly Leu Leu Gly Thr  
 275 280

<210> 3  
 <211> 663  
 <212> DNA  
 <213> Homo sapiens

<400> 3

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tccggcatct	tccaggcttc	tgccagtctg	cacgtggacc	acagtgagct	gcagggcaag	420
gccccggctgc	gggcccggga	cgtgggtgtgt	gttctcatct	gtattgagtc	cctgtgccag	480
cgcacacacgt	gcctggaggc	cgtctcaggc	ctggagagca	acagcagggt	cttcacgcta	540
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acg						663

&lt;210&gt; 4

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4

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Ala	Glu	Thr	Leu	Leu	His	Glu	Phe	Gln	Glu	Leu	Leu	Lys	Glu	Ala	Thr
				35				40						45	

Glu	Arg	Arg	Phe	Ser	Gly	Leu	Leu	Asp	Pro	Leu	Leu	Pro	Gln	Gly	Ala
				50				55						60	

Gly	Leu	Arg	Leu	Val	Gly	Glu	Ala	Phe	His	Cys	Arg	Leu	Gln	Gly	Pro
				65				70						80	

Arg	Arg	Val	Asp	Lys	Arg	Thr	Leu	Val	Glu	Leu	His	Gly	Phe	Gln	Ala
				85				90						95	

Pro	Ala	Ala	Gln	Gly	Ala	Phe	Leu	Arg	Gly	Ser	Gly	Leu	Ser	Leu	Ala
				100				105						110	

Ser	Gly	Arg	Phe	Thr	Ala	Pro	Val	Ser	Gly	Ile	Phe	Gln	Phe	Ser	Ala
				115				120						125	

Ser	Leu	His	Val	Asp	His	Ser	Glu	Leu	Gln	Gly	Lys	Ala	Arg	Leu	Arg
				130				135						140	

Ala	Arg	Asp	Val	Val	Cys	Val	Leu	Ile	Cys	Ile	Glu	Ser	Leu	Cys	Gln
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Arg	His	Thr	Cys	Leu	Glu	Ala	Val	Ser	Gly	Leu	Glu	Ser	Asn	Ser	Arg
				165				170						175	

Val	Phe	Thr	Leu	Gln	Val	Gln	Gly	Leu	Leu	Gln	Leu	Gln	Ala	Gly	Gln
				180				185						190	

Tyr Ala Ser Val Phe Val Asp Asn Gly Ser Gly Ala Val Leu Thr Ile  
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Gln Ala Gly Ser Ser Phe Ser Gly Leu Leu Leu Gly Thr  
 210 215 220

<210> 5  
 <211> 642  
 <212> DNA  
 <213> Homo sapiens

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 acggagcgcc ggttctcagg gcttctggac ccgctgctgc cccagggggc gggcctgcgg  
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<210> 6  
 <211> 214  
 <212> PRT  
 <213> Homo sapiens

<400> 6  
 Lys Arg Cys Gly Ser Arg Asp Lys Lys Pro Arg Asp Leu Phe Gly Pro  
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Pro Gly Pro Pro Gly Ala Glu Val Thr Ala Glu Thr Leu Leu His Glu  
 20 25 30

Phe Gln Glu Leu Leu Lys Glu Ala Thr Glu Arg Arg Phe Ser Gly Leu  
 35 40 45

Leu Asp Pro Leu Leu Pro Gln Gly Ala Gly Leu Arg Leu Val Gly Glu  
 50 55 60

Ala Phe His Cys Arg Leu Gln Gly Pro Arg Arg Val Asp Lys Arg Thr  
 65 70 75 80

Leu Val Glu Leu His Gly Phe Gln Ala Pro Ala Ala Gln Gly Ala Phe  
 85 90 95

Leu Arg Gly Ser Gly Leu Ser Leu Ala Ser Gly Arg Phe Thr Ala Pro  
 100 105 110

Val Ser Gly Ile Phe Gln Phe Ser Ala Ser Leu His Val Asp His Ser  
 115 120 125

Glu Leu Gln Gly Lys Ala Arg Leu Arg Ala Arg Asp Val Val Cys Val

130 135 140

Leu Ile Cys Ile Glu Ser Leu Cys Gln Arg His Thr Cys Leu Glu Ala  
145 150 155 160

Val Ser Gly Leu Glu Ser Asn Ser Arg Val Phe Thr Leu Gln Val Gln  
165 170 175

Gly Leu Leu Gln Leu Gln Ala Gly Gln Tyr Ala Ser Val Phe Val Asp  
180 185 190

Asn Gly Ser Gly Ala Val Leu Thr Ile Gln Ala Gly Ser Ser Phe Ser  
195 200 205

Gly Leu Leu Leu Gly Thr  
210

<210> 7  
<211> 636  
<212> DNA  
<213> Homo sapiens

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cgccggttct cagggcttct ggacccgctg ctgccccagg gggcgggcct gccgctggtg 180  
ggcgaggcct ttcactgccc gtcgcagggt cccccggggg tgacacaagcg gacgctggtg 240  
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gggggctcca gcttctccgg gtcgtctcctg ggcacag 636

<210> 8  
<211> 212  
<212> PRT  
<213> Homo sapiens

<400> 8  
Cys Gly Ser Arg Asp Lys Lys Pro Arg Asp Leu Phe Gly Pro Pro Gly  
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Pro Pro Gly Ala Glu Val Thr Ala Glu Thr Leu Leu His Glu Phe Gln  
20 25 30

Glu Leu Leu Lys Glu Ala Thr Glu Arg Arg Phe Ser Gly Leu Leu Asp  
35 40 45

Pro Leu Leu Pro Gln Gly Ala Gly Leu Arg Leu Val Gly Glu Ala Phe  
50 55 60

His Cys Arg Leu Gln Gly Pro Arg Arg Val Asp Lys Arg Thr Leu Val  
65 70 75 80

Glu Leu His Gly Phe Gln Ala Pro Ala Ala Gln Gly Ala Phe Leu Arg  
 85 90 95

Gly Ser Gly Leu Ser Leu Ala Ser Gly Arg Phe Thr Ala Pro Val Ser  
 100 105 110

Gly Ile Phe Gln Phe Ser Ala Ser Leu His Val Asp His Ser Glu Leu  
 115 120 125

Gln Gly Lys Ala Arg Leu Arg Ala Arg Asp Val Val Cys Val Leu Ile  
 130 135 140

Cys Ile Glu Ser Leu Cys Gln Arg His Thr Cys Leu Glu Ala Val Ser  
 145 150 155 160

Gly Leu Glu Ser Asn Ser Arg Val Phe Thr Leu Gln Val Gln Gly Leu  
 165 170 175

Leu Gln Leu Gln Ala Gly Gln Tyr Ala Ser Val Phe Val Asp Asn Gly  
 180 185 190

Ser Gly Ala Val Leu Thr Ile Gln Ala Gly Ser Ser Phe Ser Gly Leu  
 195 200 205

Leu Leu Gly Thr  
 210

<210> 9  
 <211> 510  
 <212> DNA  
 <213> Homo sapiens

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<210> 10  
 <211> 170  
 <212> PRT  
 <213> Homo sapiens

<400> 10  
 Phe Ser Gly Leu Leu Asp Pro Leu Leu Pro Gln Gly Ala Gly Leu Arg  
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Leu Val Gly Glu Ala Phe His Cys Arg Leu Gln Gly Pro Arg Arg Val  
 20 25 30

Asp Lys Arg Thr Leu Val Glu Leu His Gly Phe Gln Ala Pro Ala Ala  
 35 40 45

Gln Gly Ala Phe Leu Arg Gly Ser Gly Leu Ser Leu Ala Ser Gly Arg  
 50 55 60

Phe Thr Ala Pro Val Ser Gly Ile Phe Gln Phe Ser Ala Ser Leu His  
 65 70 75 80

Val Asp His Ser Glu Leu Gln Gly Lys Ala Arg Leu Arg Ala Arg Asp  
 85 90 95

Val Val Cys Val Leu Ile Cys Ile Glu Ser Leu Cys Gln Arg His Thr  
 100 105 110

Cys Leu Glu Ala Val Ser Gly Leu Glu Ser Asn Ser Arg Val Phe Thr  
 115 120 125

Leu Gln Val Gln Gly Leu Leu Gln Leu Gln Ala Gly Gln Tyr Ala Ser  
 130 135 140

Val Phe Val Asp Asn Gly Ser Gly Ala Val Leu Thr Ile Gln Ala Gly  
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Ser Ser Phe Ser Gly Leu Leu Leu Gly Thr  
 165 170

<210> 11

<211> 417

<212> DNA

<213> Homo sapiens

<400> 11

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 acgtgcctgg agggccgtctc aggccctggag agcaacagca gggtcttcac gctacaggtg 300  
 caggggctgc tgcagctgca ggctggacag tacgcttctg tttttgtgga caatggctcc 360  
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<210> 12

<211> 139

<212> PRT

<213> Homo sapiens

<400> 12

Val Asp Lys Arg Thr Leu Val Glu Leu His Gly Phe Gln Ala Pro Ala  
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Ala Gln Gly Ala Phe Leu Arg Gly Ser Gly Leu Ser Leu Ala Ser Gly  
 20 25 30

Arg Phe Thr Ala Pro Val Ser Gly Ile Phe Gln Phe Ser Ala Ser Leu

35	40	45	
His Val Asp His Ser Glu Leu Gln Gly Lys Ala Arg Leu Arg Ala Arg			
50	55	60	
Asp Val Val Cys Val Leu Ile Cys Ile Glu Ser Leu Cys Gln Arg His			
65	70	75	80
Thr Cys Leu Glu Ala Val Ser Gly Leu Glu Ser Asn Ser Arg Val Phe			
85	90	95	
Thr Leu Gln Val Gln Gly Leu Leu Gln Leu Gln Ala Gly Gln Tyr Ala			
100	105	110	
Ser Val Phe Val Asp Asn Gly Ser Gly Ala Val Leu Thr Ile Gln Ala			
115	120	125	
Gly Ser Ser Phe Ser Gly Leu Leu Leu Gly Thr			
130	135		
<210> 13			
<211> 405			
<212> DNA			
<213> Homo sapiens			
<400> 13			
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<211> 135			
<212> PRT			
<213> Homo sapiens			
<400> 14			
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Phe Leu Arg Gly Ser Gly Leu Ser Leu Ala Ser Gly Arg Phe Thr Ala			
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Pro Val Ser Gly Ile Phe Gln Phe Ser Ala Ser Leu His Val Asp His			
35	40	45	
Ser Glu Leu Gln Gly Lys Ala Arg Leu Arg Ala Arg Asp Val Val Cys			
50	55	60	
Val Leu Ile Cys Ile Glu Ser Leu Cys Gln Arg His Thr Cys Leu Glu			
65	70	75	80

Ala Val Ser Gly Leu Glu Ser Asn Ser Arg Val Phe Thr Leu Gln Val  
 85 90 95

Gln Gly Leu Leu Gln Leu Gln Ala Gly Gln Tyr Ala Ser Val Phe Val  
 100 105 110

Asp Asn Gly Ser Gly Ala Val Leu Thr Ile Gln Ala Gly Ser Ser Phe  
 115 120 125

Ser Gly Leu Leu Leu Gly Thr  
 130 135

<210> 15

<211> 864

<212> DNA

<213> Homo sapiens

<400> 15

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 tcccaggcct caggacctga gttctccgac gcccacatga catggctgaa ctttgcgg 180  
 cggccggacq acggcgcctt aaggaagcgg tgcggaagca gggacaagaa gccgcgggat 240  
 ctcttcggtc ccccaggacc tcagggtgca gaagtgaccg cgagactct gcttcacgag 300  
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 ctacaggtgc aggggtctgc gcagctgcag gctggacagt acgcttctgt gtttgcggac 780  
 aatggctccg gggccgtcct caccatccag gcgggctcca gcttctccgg gctgctcctg 840  
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<210> 16

<211> 288

<212> PRT

<213> Homo sapiens

<400> 16

Gly Gly Val Gly Ala Arg Arg Glu Ala Gln Arg Thr Gln Gln Pro Gly  
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Gln Arg Ala Asp Pro Pro Asn Ala Thr Ala Ser Ala Ser Ser Arg Glu  
 20 25 30

Gly Leu Pro Glu Ala Pro Lys Pro Ser Gln Ala Ser Gly Pro Glu Phe  
 35 40 45

Ser Asp Ala His Met Thr Trp Leu Asn Phe Val Arg Arg Pro Asp Asp  
 50 55 60

Gly Ala Leu Arg Lys Arg Cys Gly Ser Arg Asp Lys Lys Pro Arg Asp  
 65 70 75 80

Leu Phe Gly Pro Pro Gly Pro Pro Gly Ala Glu Val Thr Ala Glu Thr  
 85 90 95  
 Leu Leu His Glu Phe Gln Glu Leu Leu Lys Glu Ala Thr Glu Arg Arg  
 100 105 110  
 Phe Ser Gly Leu Leu Asp Pro Leu Leu Pro Gln Gly Ala Gly Leu Arg  
 115 120 125  
 Leu Val Gly Glu Ala Phe His Cys Arg Leu Gln Gly Pro Arg Arg Val  
 130 135 140  
 Asp Lys Arg Thr Leu Val Glu Leu His Gly Phe Gln Ala Pro Ala Ala  
 145 150 155 160  
 Gln Gly Ala Phe Leu Arg Gly Ser Gly Leu Ser Leu Ala Ser Gly Arg  
 165 170 175  
 Phe Thr Ala Pro Val Ser Gly Ile Phe Gln Phe Ser Ala Ser Leu His  
 180 185 190  
 Val Asp His Ser Glu Leu Gln Gly Lys Ala Arg Leu Arg Ala Arg Asp  
 195 200 205  
 Val Val Cys Val Leu Ile Cys Ile Glu Ser Leu Cys Gln Arg His Thr  
 210 215 220  
 Cys Leu Glu Ala Val Ser Gly Leu Glu Ser Asn Ser Arg Val Phe Thr  
 225 230 235 240  
 Leu Gln Val Gln Gly Leu Leu Gln Leu Gln Ala Gly Gln Tyr Ala Ser  
 245 250 255  
 Val Phe Val Asp Asn Gly Ser Gly Ala Val Leu Thr Ile Gln Ala Gly  
 260 265 270  
 Ser Ser Phe Ser Gly Leu Leu Gly Thr His His His His His His  
 275 280 285

<210> 17  
 <211> 681  
 <212> DNA  
 <213> Homo sapiens

<400> 17  
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 cgccgggtgg acaagcggac gctgggtggag ctgcattgtt tccaggctcc tgctgccc 300  
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caggtgcagg ggctgctgca gctgcaggct ggacagtacg ctctctgtgtt tgtggacaat 600  
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 accgaccatc accatcacca t 681

<210> 18  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 18  
 Pro Asp Asp Gly Ala Leu Arg Lys Arg Cys Gly Ser Arg Asp Lys Lys  
 1 5 10 15

Pro Arg Asp Leu Phe Gly Pro Pro Gly Pro Pro Gly Ala Glu Val Thr  
 20 25 30

Ala Glu Thr Leu Leu His Glu Phe Gln Glu Leu Leu Lys Glu Ala Thr  
 35 40 45

Glu Arg Arg Phe Ser Gly Leu Leu Asp Pro Leu Leu Pro Gln Gly Ala  
 50 55 60

Gly Leu Arg Leu Val Gly Glu Ala Phe His Cys Arg Leu Gln Gly Pro  
 65 70 75 80

Arg Arg Val Asp Lys Arg Thr Leu Val Glu Leu His Gly Phe Gln Ala  
 85 90 95

Pro Ala Ala Gln Gly Ala Phe Leu Arg Gly Ser Gly Leu Ser Leu Ala  
 100 105 110

Ser Gly Arg Phe Thr Ala Pro Val Ser Gly Ile Phe Gln Phe Ser Ala  
 115 120 125

Ser Leu His Val Asp His Ser Glu Leu Gln Gly Lys Ala Arg Leu Arg  
 130 135 140

Ala Arg Asp Val Val Cys Val Leu Ile Cys Ile Glu Ser Leu Cys Gln  
 145 150 155 160

Arg His Thr Cys Leu Glu Ala Val Ser Gly Leu Glu Ser Asn Ser Arg  
 165 170 175

Val Phe Thr Leu Gln Val Gln Gly Leu Leu Gln Leu Gln Ala Gly Gln  
 180 185 190

Tyr Ala Ser Val Phe Val Asp Asn Gly Ser Gly Ala Val Leu Thr Ile  
 195 200 205

Gln Ala Gly Ser Ser Phe Ser Gly Leu Leu Leu Gly Thr His His His  
 210 215 220

His His His  
 225

<210> 19  
 <211> 660  
 <212> DNA  
 <213> Homo sapiens

<400> 19  
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 acggagcgcg ggttctcagg gcttctggac ccgctgctgc cccagggggc gggcctgcgg 180  
 ctgggtggcg aggcccttca ctgccggctg cagggtcccc gccgggtgga caagcggacg 240  
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 ggtctgagcc tggcctcggg tcggttcacg gccccgtgt ccggcatctt ccagttctct 360  
 gccagtctgc acgtggacca cagttagctg cagggcaagg cccggctgcg ggccggggac 420  
 gtgggtgtgt ttctcatctg tatttagtcc ctgtgccagc gccacacgtg cctggaggcc 480  
 gtctcaggcc tggagagcaa cagcagggtc ttcacgtac aggtgcaggg gctgctgcag 540  
 ctgcaggctg gacagtacgc ttctgtgtt gtggacaatg gctccggggc cgtcctcacc 600  
 atccaggcgg gctccagctt ctccgggctg ctccctggca cgcaccatca ccatcaccat 660

<210> 20  
 <211> 220  
 <212> PRT  
 <213> Homo sapiens

<400> 20  
 Lys Arg Cys Gly Ser Arg Asp Lys Lys Pro Arg Asp Leu Phe Gly Pro  
 1 5 10 15

Pro Gly Pro Pro Gly Ala Glu Val Thr Ala Glu Thr Leu Leu His Glu  
 20 25 30

Phe Gln Glu Leu Leu Lys Glu Ala Thr Glu Arg Arg Phe Ser Gly Leu  
 35 40 45

Leu Asp Pro Leu Leu Pro Gln Gly Ala Gly Leu Arg Leu Val Gly Glu  
 50 55 60

Ala Phe His Cys Arg Leu Gln Gly Pro Arg Arg Val Asp Lys Arg Thr  
 65 70 75 80

Leu Val Glu Leu His Gly Phe Gln Ala Pro Ala Ala Gln Gly Ala Phe  
 85 90 95

Leu Arg Gly Ser Gly Leu Ser Leu Ala Ser Gly Arg Phe Thr Ala Pro  
 100 105 110

Val Ser Gly Ile Phe Gln Phe Ser Ala Ser Leu His Val Asp His Ser  
 115 120 125

Glu Leu Gln Gly Lys Ala Arg Leu Arg Ala Arg Asp Val Val Cys Val  
 130 135 140

Leu Ile Cys Ile Glu Ser Leu Cys Gln Arg His Thr Cys Leu Glu Ala  
 145 150 155 160

Val Ser Gly Leu Glu Ser Asn Ser Arg Val Phe Thr Leu Gln Val Gln

165 170 175

Gly Leu Leu Gln Leu Gln Ala Gly Gln Tyr Ala Ser Val Phe Val Asp  
180 185 190

Asn Gly Ser Gly Ala Val Leu Thr Ile Gln Ala Gly Ser Ser Phe Ser  
195 200 205

Gly Leu Leu Leu Gly Thr His His His His His His  
210 215 220

<210> 21

<211> 654

<212> DNA

<213> Homo sapiens

<400> 21

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cgccggttct cagggcttct ggaccgcgtg ctgccccagg gggcgcccct gcggtggtg 180  
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ctgcacgtgg accacagtga gctgcagggc aaggccggc tgccggcccg ggacgtggtg 420  
tgtgttctca tctgtattga gtcctgtgc cagcgcacaca cgtgcctggaa ggcgcgtctca 480  
ggcctggaga gcaacacgcg ggtcttcacg ctacagggtgc aggggctgct gcagctgcag 540  
gctggacagt acgcttctgt gtttgtggac aatggctccg ggccgcctt caccatccag 600  
gcgggctcca gcttctccgg gctgctcctg ggcatgcacc atcaccatca ccat 654

<210> 22

<211> 218

<212> PRT

<213> Homo sapiens

<400> 22

Cys Gly Ser Arg Asp Lys Lys Pro Arg Asp Leu Phe Gly Pro Pro Gly  
1 5 10 15

Pro Pro Gly Ala Glu Val Thr Ala Glu Thr Leu Leu His Glu Phe Gln  
20 25 30

Glu Leu Leu Lys Glu Ala Thr Glu Arg Arg Phe Ser Gly Leu Leu Asp  
35 40 45

Pro Leu Leu Pro Gln Gly Ala Gly Leu Arg Leu Val Gly Glu Ala Phe  
50 55 60

His Cys Arg Leu Gln Gly Pro Arg Arg Val Asp Lys Arg Thr Leu Val  
65 70 75 80

Glu Leu His Gly Phe Gln Ala Pro Ala Ala Gln Gly Ala Phe Leu Arg  
85 90 95

Gly Ser Gly Leu Ser Leu Ala Ser Gly Arg Phe Thr Ala Pro Val Ser  
100 105 110

Gly Ile Phe Gln Phe Ser Ala Ser Leu His Val Asp His Ser Glu Leu  
 115 120 125

Gln Gly Lys Ala Arg Leu Arg Ala Arg Asp Val Val Cys Val Leu Ile  
 130 135 140

Cys Ile Glu Ser Leu Cys Gln Arg His Thr Cys Leu Glu Ala Val Ser  
 145 150 155 160

Gly Leu Glu Ser Asn Ser Arg Val Phe Thr Leu Gln Val Gln Gly Leu  
 165 170 175

Leu Gln Leu Gln Ala Gly Gln Tyr Ala Ser Val Phe Val Asp Asn Gly  
 180 185 190

Ser Gly Ala Val Leu Thr Ile Gln Ala Gly Ser Ser Phe Ser Gly Leu  
 195 200 205

Leu Leu Gly Thr His His His His His  
 210 215

<210> 23

<211> 528

<212> DNA

<213> Homo sapiens

<400> 23

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catggttcc	aggctcctgc	tgccccaaagg	gccttcctgc	gaggctccgg	tctgagcctg	180
gcctcgggtc	ggttcacggc	ccccgtgtcc	ggcatcttcc	agttctctgc	cagtctgcac	240
gtggaccaca	gtgagctgca	gggcaaggcc	cggctgcggg	cccgggacgt	ggtgtgtgtt	300
ctcatctgt	ttgagtcct	gtgccagcgc	cacaatgtcc	tggaggccgt	ctcaggcctg	360
gagagcaaca	gcagggctt	cacgctacag	gtgcaggggc	tctgcagct	gcaggctgga	420
cagtacgctt	ctgtgtttgt	ggacaatggc	tccggggccg	tcctcaccat	ccaggcgggc	480
tccagcttct	ccgggctgct	cctgggcacg	caccatcacc	atcaccat		528

<210> 24

<211> 176

<212> PRT

<213> Homo sapiens

<400> 24

Phe Ser Gly Leu Leu Asp Pro Leu Leu Pro Gln Gly Ala Gly Leu Arg  
 1 5 10 15

Leu Val Gly Glu Ala Phe His Cys Arg Leu Gln Gly Pro Arg Arg Val  
 20 25 30

Asp Lys Arg Thr Leu Val Glu Leu His Gly Phe Gln Ala Pro Ala Ala  
 35 40 45

Gln Gly Ala Phe Leu Arg Gly Ser Gly Leu Ser Leu Ala Ser Gly Arg  
 50 55 60

Phe	Thr	Ala	Pro	Val	Ser	Gly	Ile	Phe	Gln	Phe	Ser	Ala	Ser	Leu	His
65															80
Val	Asp	His	Ser	Glu	Leu	Gln	Gly	Lys	Ala	Arg	Leu	Arg	Ala	Arg	Asp
	85							90							95
Val	Val	Cys	Val	Leu	Ile	Cys	Ile	Glu	Ser	Leu	Cys	Gln	Arg	His	Thr
		100						105						110	
Cys	Leu	Glu	Ala	Val	Ser	Gly	Leu	Glu	Ser	Asn	Ser	Arg	Val	Phe	Thr
		115						120						125	
Leu	Gln	Val	Gln	Gly	Leu	Leu	Gln	Leu	Gln	Ala	Gly	Gln	Tyr	Ala	Ser
		130						135						140	
Val	Phe	Val	Asp	Asn	Gly	Ser	Gly	Ala	Val	Leu	Thr	Ile	Gln	Ala	Gly
145															160
Ser	Ser	Phe	Ser	Gly	Leu	Leu	Leu	Gly	Thr	His	His	His	His	His	
									165		170				175

<210>	25														
<211>	435														
<212>	DNA														
<213>	Homo sapiens														
<400>	25														
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atcttccagt	tctctgccag	tctgcacgtg	gaccacagtg	agctgcaggg	caaggccccg										180
ctgcgggccc	gggacgtgg	gtgtgttctc	atctgtattg	agtcctctgt	ccagcgcac										240
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caggggctgc	tgcagctgca	ggctggacag	tacgcttctg	tgtttgtgga	caatgctcc										360
ggggccgtcc	tcaccatcca	ggcgggctcc	agcttctccg	ggctgctcct	gggcacgcac										420
cataccatcc	accat														435

<210>	26														
<211>	145														
<212>	PRT														
<213>	Homo sapiens														
<400>	26														
Val	Asp	Lys	Arg	Thr	Leu	Val	Glu	Leu	His	Gly	Phe	Gln	Ala	Pro	Ala
1															15

Ala	Gln	Gly	Ala	Phe	Leu	Arg	Gly	Ser	Gly	Leu	Ser	Leu	Ala	Ser	Gly
20								25						30	
Arg	Phe	Thr	Ala	Pro	Val	Ser	Gly	Ile	Phe	Gln	Phe	Ser	Ala	Ser	Leu
35								40						45	
His	Val	Asp	His	Ser	Glu	Leu	Gln	Gly	Lys	Ala	Arg	Leu	Arg	Ala	Arg
50								55						60	

Asp Val Val Cys Val Leu Ile Cys Ile Glu Ser Leu Cys Gln Arg His  
 65 70 75 80

Thr Cys Leu Glu Ala Val Ser Gly Leu Glu Ser Asn Ser Arg Val Phe  
 85 90 95

Thr Leu Gln Val Gln Gly Leu Leu Gln Leu Gln Ala Gly Gln Tyr Ala  
 100 105 110

Ser Val Phe Val Asp Asn Gly Ser Gly Ala Val Leu Thr Ile Gln Ala  
 115 120 125

Gly Ser Ser Phe Ser Gly Leu Leu Leu Gly Thr His His His His His  
 130 135 140

His  
 145

<210> 27  
 <211> 423  
 <212> DNA  
 <213> Homo sapiens

<400> 27  
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 tctgcccagtc tgcacgtgga ccacagtggag ctgcaggggca aggccccggct gggggcccg 180  
 gacgtgggtgt gtgttctcat ctgtattggag tccctgtgcc agcgccacac gtgcctggag 240  
 gccgtctcaag gcctggagag caacagcagg gtcttacgc tacaggtgca ggggctgctg 300  
 cagctgcagg ctggacagta cgcttctgtg tttgtggaca atggctccgg ggcgcgtcctc 360  
 accatccagg cgggctccag cttctccgg ctgctccctgg gcacgcacca tcaccatcac 420  
 cat 423

<210> 28  
 <211> 141  
 <212> PRT  
 <213> Homo sapiens

<400> 28  
 Thr Leu Val Glu Leu His Gly Phe Gln Ala Pro Ala Ala Gln Gly Ala  
 1 5 10 15

Phe Leu Arg Gly Ser Gly Leu Ser Leu Ala Ser Gly Arg Phe Thr Ala  
 20 25 30

Pro Val Ser Gly Ile Phe Gln Phe Ser Ala Ser Leu His Val Asp His  
 35 40 45

Ser Glu Leu Gln Gly Lys Ala Arg Leu Arg Ala Arg Asp Val Val Cys  
 50 55 60

Val Leu Ile Cys Ile Glu Ser Leu Cys Gln Arg His Thr Cys Leu Glu  
 65 70 75 80

Ala Val Ser Gly Leu Glu Ser Asn Ser Arg Val Phe Thr Leu Gln Val  
 85 90 95

Gln Gly Leu Leu Gln Leu Gln Ala Gly Gln Tyr Ala Ser Val Phe Val  
 100 105 110

Asp Asn Gly Ser Gly Ala Val Leu Thr Ile Gln Ala Gly Ser Ser Phe  
 115 120 125

Ser Gly Leu Leu Leu Gly Thr His His His His His  
 130 135 140

<210> 29

<211> 906

<212> DNA

<213> Homo sapiens

<400> 29

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 ccccccaacg ccaccggccag cgcgtccctcc cgcgaggggc tgcccgagggc ccccaagcca  
 tcccaggccct caggacctga gttctccgac gcccacatgaa catggctgaa ctttgtccgg  
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 cagcgcacaca cgtgcctgaa gcccgtctca ggcctggaga gcaacagcag ggtcttcacg  
 ctacagggtgc aggggctgtc gcaagctgcag gctggacagt acgcttctgt gtttgtggac  
 aatggctccg gggccgtcctt caccatccag gcccgtccca gcttctccgg gctgctcctg  
 ggcacag 906

<210> 30

<211> 302

<212> PRT

<213> Homo sapiens

<400> 30

Met Arg Arg Trp Ala Trp Ala Ala Val Val Val Val Leu Leu Gly Pro Gln  
 1 5 10 15

Leu Val Leu Leu Gly Gly Val Gly Ala Arg Arg Glu Ala Gln Arg Thr  
 20 25 30

Gln Gln Pro Gly Gln Arg Ala Asp Pro Pro Asn Ala Thr Ala Ser Ala  
 35 40 45

Ser Ser Arg Glu Gly Leu Pro Glu Ala Pro Lys Pro Ser Gln Ala Ser  
 50 55 60

Gly Pro Glu Phe Ser Asp Ala His Met Thr Trp Leu Asn Phe Val Arg  
 65 70 75 80

Arg Pro Asp Asp Gly Ala Leu Arg Lys Arg Cys Gly Ser Arg Asp Lys  
 85 90 95

Lys Pro Arg Asp Leu Phe Gly Pro Pro Gly Pro Pro Gly Ala Glu Val  
 100 105 110

Thr Ala Glu Thr Leu Leu His Glu Phe Gln Glu Leu Leu Lys Glu Ala  
 115 120 125

Thr Glu Arg Arg Phe Ser Gly Leu Leu Asp Pro Leu Leu Pro Gln Gly  
 130 135 140

Ala Gly Leu Arg Leu Val Gly Glu Ala Phe His Cys Arg Leu Gln Gly  
 145 150 155 160

Pro Arg Arg Val Asp Lys Arg Thr Leu Val Glu Leu His Gly Phe Gln  
 165 170 175

Ala Pro Ala Ala Gln Gly Ala Phe Leu Arg Gly Ser Gly Leu Ser Leu  
 180 185 190

Ala Ser Gly Arg Phe Thr Ala Pro Val Ser Gly Ile Phe Gln Phe Ser  
 195 200 205

Ala Ser Leu His Val Asp His Ser Glu Leu Gln Gly Lys Ala Arg Leu  
 210 215 220

Arg Ala Arg Asp Val Val Cys Val Leu Ile Cys Ile Glu Ser Leu Cys  
 225 230 235 240

Gln Arg His Thr Cys Leu Glu Ala Val Ser Gly Leu Glu Ser Asn Ser  
 245 250 255

Arg Val Phe Thr Leu Gln Val Gln Gly Leu Leu Gln Leu Gln Ala Gly  
 260 265 270

Gln Tyr Ala Ser Val Phe Val Asp Asn Gly Ser Gly Ala Val Leu Thr  
 275 280 285

Ile Gln Ala Gly Ser Ser Phe Ser Gly Leu Leu Leu Gly Thr  
 290 295 300

<210> 31  
 <211> 924  
 <212> DNA  
 <213> Homo sapiens

<400> 31  
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 ccccccacgc ccacccggcag cgcgtcctcc cgcgaggggc tgcccgaggc ccccaagcca 180  
 tcccaggcct caggacctga gtctccgac gcccacatga catggctgaa ctttgcgg 240  
 cggccggacg acggccgctt aaggaagcgg tgccggaaagca gggacaagaa gccgcgggat 300  
 ctcttcggtc ccccaggacc tccaggtgca gaagtgaccg cgagactct gcttcacgag 360

tttcaggagc	tgctgaaaga	ggccacggag	cgccggttct	cagggcttct	ggaccgcgtg	420
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ccccgcggg	tggacaagcg	gacgctggtg	gagctgcatg	gttccaggc	tcctgctgcc	540
caaggtgcct	tcctgcgagg	ctccggtctg	agcctggct	cgggtcggtt	cacggcccc	600
gtgtccggca	tcttccagtt	ctctgccagt	ctgcacgtgg	accacagtga	gctgcaggc	660
aaggccggc	tgcggcccg	ggacgtggtg	tgtgttctca	tctgtattga	gtccctgtgc	720
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aatggctccg	ggccgtctt	caccatccag	gcgggctcca	gcttctccgg	gctgctcctg	900
ggcacgacc	atcaccatca	ccat				924

<210> 32

<211> 308

<212> PRT

<213> Homo sapiens

<400> 32

Met	Arg	Arg	Trp	Ala	Trp	Ala	Ala	Val	Val	Val	Leu	Leu	Gly	Pro	Gln
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Leu	Val	Leu	Leu	Gly	Gly	Val	Gly	Ala	Arg	Arg	Glu	Ala	Gln	Arg	Thr
															30
				20			25								

Gln	Gln	Pro	Gly	Gln	Arg	Ala	Asp	Pro	Pro	Asn	Ala	Thr	Ala	Ser	Ala
															45
				35			40								

Ser	Ser	Arg	Glu	Gly	Leu	Pro	Glu	Ala	Pro	Lys	Pro	Ser	Gln	Ala	Ser
															60
				50			55								

Gly	Pro	Glu	Phe	Ser	Asp	Ala	His	Met	Thr	Trp	Leu	Asn	Phe	Val	Arg
															80
				65			70				75				

Arg	Pro	Asp	Asp	Gly	Ala	Leu	Arg	Lys	Arg	Cys	Gly	Ser	Arg	Asp	Lys
															95
				85			90								

Lys	Pro	Arg	Asp	Leu	Phe	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Ala	Glu	Val
															110
				100			105								

Thr	Ala	Glu	Thr	Leu	Leu	His	Glu	Phe	Gln	Glu	Leu	Leu	Lys	Glu	Ala
															125
				115			120								

Thr	Glu	Arg	Arg	Phe	Ser	Gly	Leu	Leu	Asp	Pro	Leu	Leu	Pro	Gln	Gly
															140
				130			135								

Ala	Gly	Leu	Arg	Leu	Val	Gly	Glu	Ala	Phe	His	Cys	Arg	Leu	Gln	Gly
															160
				145			150				155				

Pro	Arg	Arg	Val	Asp	Lys	Arg	Thr	Leu	Val	Glu	Leu	His	Gly	Phe	Gln
															175
				165			170								

Ala	Pro	Ala	Ala	Gln	Gly	Ala	Phe	Leu	Arg	Gly	Ser	Gly	Leu	Ser	Leu
															190
				180			185								

Ala	Ser	Gly	Arg	Phe	Thr	Ala	Pro	Val	Ser	Gly	Ile	Phe	Gln	Phe	Ser
															205
				195			200								

Ala Ser Leu His Val Asp His Ser Glu Leu Gln Gly Lys Ala Arg Leu  
 210 215 220

Arg Ala Arg Asp Val Val Cys Val Leu Ile Cys Ile Glu Ser Leu Cys  
 225 230 235 240

Gln Arg His Thr Cys Leu Glu Ala Val Ser Gly Leu Glu Ser Asn Ser  
 245 250 255

Arg Val Phe Thr Leu Gln Val Gln Gly Leu Leu Gln Leu Gln Ala Gly  
 260 265 270

Gln Tyr Ala Ser Val Phe Val Asp Asn Gly Ser Gly Ala Val Leu Thr  
 275 280 285

Ile Gln Ala Gly Ser Ser Phe Ser Gly Leu Leu Leu Gly Thr His His  
 290 295 300

His His His His  
 305

<210> 33  
 <211> 831  
 <212> DNA  
 <213> Homo sapiens

<400> 33  
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 gccagcgcgt cctccgcga gggctgccc gaggcccca agccatccc ggcctcagga 120  
 cctgagttct ccgacgccc catgacatgg ctgaacttg tccggcgcc ggacgcggc 180  
 gccttaagga agcggtcgaa aagcagggac aagaagccgc ggatctctt cggccccca 240  
 ggacctccag gtgcagaagt gaccgcggag actctgcttc acgagttca ggagctgctg 300  
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 ggctgcggc tggggcgca ggccttcac tgccgctgc aggtccccc cgggtggac 420  
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 cagttctctg ccagtctgca cttggaccac agtgagctgc agggcaaggc cggctgccc 600  
 gcccgggacg tggtgtgtgt ttcatctgt attgagttc tggccagcg ccacacgtgc 660  
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 ctgctgcagc tgcaggctgg acagtaacgt tctgttttg tgacaatgg ctccggggcc 780  
 gtccctacca tccaggccgg ctccagttc tccggctgc tccggac 831

<210> 34  
 <211> 277  
 <212> PRT  
 <213> Homo sapiens

<400> 34  
 Arg Arg Glu Ala Gln Arg Thr Gln Gln Pro Gly Gln Arg Ala Asp Pro  
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Pro Asn Ala Thr Ala Ser Ala Ser Ser Arg Glu Gly Leu Pro Glu Ala  
 20 25 30

Pro Lys Pro Ser Gln Ala Ser Gly Pro Glu Phe Ser Asp Ala His Met  
 35 40 45

Thr Trp Leu Asn Phe Val Arg Arg Pro Asp Asp Gly Ala Leu Arg Lys  
 50 55 60

Arg Cys Gly Ser Arg Asp Lys Lys Pro Arg Asp Leu Phe Gly Pro Pro  
 65 70 75 80

Gly Pro Pro Gly Ala Glu Val Thr Ala Glu Thr Leu Leu His Glu Phe  
 85 90 95

Gln Glu Leu Leu Lys Glu Ala Thr Glu Arg Arg Phe Ser Gly Leu Leu  
 100 105 110

Asp Pro Leu Leu Pro Gln Gly Ala Gly Leu Arg Leu Val Gly Glu Ala  
 115 120 125

Phe His Cys Arg Leu Gln Gly Pro Arg Arg Val Asp Lys Arg Thr Leu  
 130 135 140

Val Glu Leu His Gly Phe Gln Ala Pro Ala Ala Gln Gly Ala Phe Leu  
 145 150 155 160

Arg Gly Ser Gly Leu Ser Leu Ala Ser Gly Arg Phe Thr Ala Pro Val  
 165 170 175

Ser Gly Ile Phe Gln Phe Ser Ala Ser Leu His Val Asp His Ser Glu  
 180 185 190

Leu Gln Gly Lys Ala Arg Leu Arg Ala Arg Asp Val Val Cys Val Leu  
 195 200 205

Ile Cys Ile Glu Ser Leu Cys Gln Arg His Thr Cys Leu Glu Ala Val  
 210 215 220

Ser Gly Leu Glu Ser Asn Ser Arg Val Phe Thr Leu Gln Val Gln Gly  
 225 230 235 240

Leu Leu Gln Leu Gln Ala Gly Gln Tyr Ala Ser Val Phe Val Asp Asn  
 245 250 255

Gly Ser Gly Ala Val Leu Thr Ile Gln Ala Gly Ser Ser Phe Ser Gly  
 260 265 270

Leu Leu Leu Gly Thr  
 275

<210> 35  
 <211> 849  
 <212> DNA  
 <213> Homo sapiens

<400> 35  
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cctgagttct	ccgacgccc	catgacatgg	ctgaacttg	tccggcgcc	ggacgacgac	180
gccttaagga	agcggtcg	aagcagggac	aagaaggcc	ggatcttt	cggtccccca	240
ggacctccag	gtgcagaagt	gaccgccc	actctgttc	acgagttca	ggagctgctg	300
aaagaggcca	cggagcgc	gttctcagg	cttctggacc	cgctgtg	ccagggggcg	360
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Pro	Lys	Pro	Ser	Gln	Ala	Ser	Gly	Pro	Glu	Phe	Ser	Asp	Ala	His	Met	
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Thr	Trp	Leu	Asn	Phe	Val	Arg	Arg	Pro	Asp	Asp	Gly	Ala	Leu	Arg	Lys		
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Arg	Cys	Gly	Ser	Arg	Asp	Lys	Lys	Pro	Arg	Asp	Leu	Phe	Gly	Pro	Pro			
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Gly	Pro	Pro	Gly	Ala	Glu	Val	Thr	Ala	Glu	Thr	Leu	Leu	His	Glu	Phe			
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Gln	Glu	Leu	Leu	Lys	Glu	Ala	Thr	Glu	Arg	Arg	Phe	Ser	Gly	Leu	Leu			
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Asp	Pro	Leu	Leu	Pro	Gln	Gly	Ala	Gly	Leu	Arg	Leu	Val	Gly	Glu	Ala			
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Phe	His	Cys	Arg	Leu	Gln	Gly	Pro	Arg	Arg	Val	Asp	Lys	Arg	Thr	Leu			
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Val	Glu	Leu	His	Gly	Phe	Gln	Ala	Pro	Ala	Ala	Gln	Gly	Ala	Phe	Leu					
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Ser Gly Ile Phe Gln Phe Ser Ala Ser Leu His Val Asp His Ser Glu

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Ile Cys Ile Glu Ser Leu Cys Gln Arg His Thr Cys Leu Glu Ala Val		
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Ser Gly Leu Glu Ser Asn Ser Arg Val Phe Thr Leu Gln Val Gln Gly		
225	230	235
Leu Leu Gln Leu Gln Ala Gly Gln Tyr Ala Ser Val Phe Val Asp Asn		
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Arg Glu Ala Gln Arg Thr Gln Gln Pro Gly Gln Arg Ala Asp Pro Pro			
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Asn Ala Thr Ala Ser Ala Ser Ser Arg Glu Gly Leu Pro Glu Ala Pro			
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Lys Pro Ser Gln Ala Ser Gly Pro Glu Phe Ser Asp Ala His Met Thr			
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Trp Leu Asn Phe Val Arg Arg Pro Asp Asp Gly Ala Leu Arg Lys Arg			
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Cys Gly Ser Arg Asp Lys Pro Arg Asp Leu Phe Gly Pro Pro Gly			
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Pro Pro Gly Ala Glu Val Thr Ala Glu Thr Leu Leu His Glu Phe Gln			
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Pro Leu Leu Pro Gln Gly Ala Gly Leu Arg Leu Val Gly Glu Ala Phe			
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Glu Leu His Gly Phe Gln Ala Pro Ala Ala Gln Gly Ala Phe Leu Arg			
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Gly Ser Gly Leu Ser Leu Ala Ser Gly Arg Phe Thr Ala Pro Val Ser			
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Gln	Gly	Lys	Ala	Arg	Leu	Arg	Ala	Arg	Asp	Val	Val	Cys	Val	Leu	Ile	
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Cys	Ile	Glu	Ser	Leu	Cys	Gln	Arg	His	Thr	Cys	Leu	Glu	Ala	Val	Ser	
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Ser	Gly	Ala	Val	Leu	Thr	Ile	Gln	Ala	Gly	Ser	Ser	Phe	Ser	Gly	Leu	
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ctc	ctg	ggc	acg	t												929
Leu	Leu	Gly	Thr													
		300														